

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:030**

**Permittee Name:** Meritor  
**Mailing Address:** 115 Ogles Avenue, Franklin, KY 42134

**Source Name:** Meritor  
**Mailing Address:** 115 Ogles Avenue  
Franklin, KY 42134

**Source Location:** 115 Ogles Avenue

**Permit ID:** F-08-008  
**Agency Interest #:** 3983  
**Activity ID:** APE20070001  
**Review Type:** Conditional Major, Operating  
**Source ID:** 21-213-00015

**Regional Office:** Bowling Green Regional Office  
1508 Westen Avenue  
Bowling Green, KY 42104  
(270) 746-7475

**County:** Simpson

**Application**  
**Complete Date:** February 28, 2008  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
F-98-005	Initial	F244	9/8/1997	7/2/1998	Initial Construction Permit
F-98-005 Rev 1	Revision 1	G134	6/2/1999	6/7/1999	
F-98-005 Rev 2	Revision 2	Log # 6490		11/4/2000	
F-03-007	Renewal	APE20050002	2/4/2003	6/4/2003	
F-08-008	Renewal	APE20070001	1/16/2008		Changes to Section B, Section C and Section D. Modifications to existing permit were made.

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****04 (100) Scrap and Charge Handling, construction commenced: November 25, 1996**

**Description:** The emission point consists of emissions from the handling and charging of scrap metal to the melt furnaces. The building serves as an enclosure at 70% control efficiency.

Annual hours of operation: 8760 hours/year

Control Device: None

Emission Sources: Max Throughputs: Pollutants:

Scrap metal charge 8.8 ton/hr PM10, PT

**12 (-) Shotblast, construction commenced: November 25, 1996**

**Description:** The emission point consists of emissions from shotblasting.

Annual hours of operation: 8760 hours/year

Control Device: Baghouse

Emission Sources: Max Throughputs: Pollutants:

Metal charge 9.9 ton/hr PM10, PT

**APPLICABLE REGULATIONS:**

**401 KAR 59:010, New process operations.** Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

- a. *Opacity Standard:* Pursuant to Regulation 401 KAR 59:010 Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4. **Specific Monitoring Requirements** and 5. **Specific Record Keeping Requirements** below.

- b. *Mass Emission Standard for particulate emissions from all emission points:* Pursuant to Regulation 401 KAR 59:010 Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour. See **SECTION D (2)**.

Compliance demonstration: Pursuant to Regulation 401 KAR 59:010 Section 4 (5), the process weight shall be determined in average hourly tons by averaging the daily process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \cdot EF$$

Where E is particulate emissions in lbs/hr, P is averaged process weight in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of process weight.

**3. Testing Requirements:**

- a. Pursuant to Regulations 401 KAR 59:005 Section 2 (2) and 401 KAR 50:45 Section 1, performance testing using the Reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b. The control efficiency of the baghouse (EP 12) for PM/PM10 shall be determined by stack and exhaust fans (if any) testing.

**4. Specific Monitoring Requirements:**

- a. The permittee shall survey the emission unit for visible emissions from each stack or vent exiting the facility building and maintain a log of observations weekly.
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.
  - iii. The opacity observed shall be recorded in the weekly log.
  - iv. A representative of the permittee certified in Visible Emissions Evaluations shall perform the reading.
  - v. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
- b. The permittee shall install, calibrate, maintain and operate according to manufacturer's specification, a monitoring device (differential pressure gauge or manometer) to determine the pressure drop across the baghouse once a day during the operation of the unit.

**5. Specific Recordkeeping Requirements:**

- a.. A log shall be kept of all emission observations. Notation in the weekly log shall be made of to the following:
  - (1) Whether any air emissions (except for water vapor) were visible from the plant.
  - (2) Weekly observations of visible emissions during operation of associated equipment.
  - (3) Observations of visible emissions during all periods of control equipment

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

malfunction. If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

**6. Specific Reporting Requirements:**

See SECTION F below

**7. Specific Control Equipment Operating Conditions:**

Control device shall be operated according to manufacturer's specifications. The permittee shall monitor and maintain records of the daily hours of operation and periods of malfunction of the control equipment.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****05 (200) #1 Induction Furnace, construction commenced: November 25, 1996**

**Description:** The emission point consists of one induction furnace with common baghouse shared with point 6. The baghouse has a capture efficiency of 85% and a control efficiency of 95%.

Annual hours of operation:	8760 hours/year	
Control Device:	Baghouse	
Emission Sources:	Max Throughputs:	Pollutants:
Scrap metal charge	4.4 ton/hr	PM10, PT, Pb, Cr, Co, Mn, Ni

**06 (210) #2 Induction Furnace, construction commenced: November 25, 1996**

**Description:** The emission point consists of one induction furnace with common baghouse shared with point 5. The baghouse has a capture efficiency of 85% and a control efficiency of 95%.

Annual hours of operation:	8760 hours/year	
Control Device:	Baghouse	
Emission Sources:	Max Throughputs:	Pollutants:
Scrap metal charge	4.4 ton/hr	PM10, PT, Pb, Cr, Co, Mn, Ni

**16 (-) Pressure Pour Furnace, construction commenced: 2003****17 (-) Backup Pressure Pour Furnace, construction commenced: 2005**

**Description:** The emission point consists of one primary pressure pour furnace and one backup pressure pour with no associated control equipment. Assuming a 70% capture inside the building. Only one pressure pour furnace can be operated at a time. The backup pressure pour furnace is used to maintain production when maintenance is performed on the primary pressure pour furnace.

Annual hours of operation:	8760 hours/year	
Control Device:	None	
Emission Sources:	Max Throughputs:	Pollutants:
Molten metal	8.8 ton/hr	PM10, PT, Pb, Cr, Co, Mn, Ni

**APPLICABLE REGULATIONS:**

**401 KAR 59:010, New process operations.** Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975.

**401 KAR 63:021, Existing sources emitting toxic air pollutants.**

**1. Operating Limitations:**

Only one pressure pour furnace may be operated at a time.

**2. Emission Limitations:**

- a. *Opacity Standard:* Pursuant to Regulation 401 KAR 59:010 Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4. **Specific Monitoring Requirements** and 5. **Specific Record Keeping Requirements** below.

- b. *Mass Emission Standard for particulate emissions from all emission points:* Pursuant to Regulation 401 KAR 59:010 Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour. See **SECTION D (2)**.

Compliance demonstration: Pursuant to Regulation 401 KAR 59:010 Section 4 (5), the process weight shall be determined in average hourly tons by averaging the daily process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \cdot EF$$

Where E is particulate emissions in lbs/hr, P is averaged process weight in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of process weight.

- c. HAPs (hazardous air pollutants) emissions shall not exceed 9 tons/year individual and 22.5 tons/year combination based on a 12 month rolling total for the entire source to preclude a major source Title V classification. See Section D for lead limitations.

**3. Testing Requirements:**

- a. One time performance stack test shall be conducted on all Baghouse control devices, connected to the emission points listed above to calculate the PM/PM10 and Lead emissions.  
The testing for capture efficiency shall be done within 180 days of the issuance of the final permit.
- b. Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

- a. Weekly observations of emissions from the furnaces baghouse stack shall be made. If visible emissions are noted, then an EPA Reference Method 9 shall be performed.
- b. See Section 5 of this part, Specific Recordkeeping Requirements.



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Record Keeping Requirements:**

A log shall be kept on all visible emissions observations. Notification in the weekly log shall be made of the following:

- a. Whether any air emissions (except for water vapor) were visible from the plant.
- b. Whether the visible emission were normal for the process.
- c. The cause of any abnormal emissions and any corrective actions taken.

**6. Specific Reporting Requirements:**

- a. Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division for Air Quality within 30 days of the exceedance as specified in the Section F.
- b. Following an exceedance and for a period of at least 12 months, the permittee shall submit, within 30 days of the end of each calendar month, the following information:
  - i. The total hours of operation.
  - ii. The total charge throughput.
  - iii. The total pollutant emission rates hourly and 12-month rolling (based on monthly average).
  - iv. The log of weekly emission observations from each stack.

**7. Specific Control Equipment Operating Conditions:**

- a. The baghouse shall be in place and operational at all times when the affected facility is operating and shall be maintained in accordance with the manufacturer's specifications.
- b. Maintain on-site weekly log of the pressure drop across the baghouse and ensure it remains in the proper operating range.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****07 (220)      Transfer to Ladle, construction commenced: November 25, 1996**

**Description:** The emission point consists of emissions from the transfer of molten metal from the furnace to the pouring ladle. Emissions from this point are controlled 70% by the building.

Annual hours of operation:	8760 hours/year	
Control Device:	Building	
Emission Sources:	Max Throughputs:	Pollutants:
Molten metal	8.8 ton/hr	PM10, PT, Pb, Cr, Co, Mn, Ni

**09 (240)      Pouring & Cooling, construction commenced: November 25, 1996**

**Description:** The emission point consists of emissions from the casting and cooling of molten metal. Emissions from this point are controlled 70% by the building.

Annual hours of operation:	8760 hours/year	
Control Device:	None	
Emission Sources:	Max Throughputs:	Pollutants:
Molten metal	8.8 ton/hr	PM10, PT, Pb, Cr, Co, Mn, Ni

**APPLICABLE REGULATIONS:**

**401 KAR 59:010, New process operations.** Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975.

**401 KAR 63:021, Existing sources emitting toxic air pollutants.**

**1. Operating Limitations:**

None.

**2. Emission Limitations:**

- a. *Opacity Standard:* Pursuant to Regulation 401 KAR 59:010 Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4. **Specific Monitoring Requirements** and 5. **Specific Record Keeping Requirements** below.

- b. *Mass Emission Standard for particulate emissions from all emission points:* Pursuant to Regulation 401 KAR 59:010 Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour.

Compliance demonstration: Section 4 (5), the process weight shall be determined in average hourly tons by averaging the daily process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \cdot EF$$

Where E is particulate emissions in lbs/hr, P is averaged process weight in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of process weight.

- c. HAPs (hazardous air pollutants) emissions shall not exceed 9 tons/year individual and 22.5 tons/year combination based on a 12 month rolling total for the entire source to preclude a major source Title V classification. See Section D for lead limitations.

**3. Testing Requirements:**

- a. Pursuant to Regulations 401 KAR 61:005 Section 2 (2) and 401 KAR 50:45 Section 1, performance testing using the Reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b. The exhaust fans of the building, shall be tested for PM/PM10 and Lead emissions within 180 days of the issuance of the final permit. The permittee must submit a test protocol sixty days prior to the test date. The testing will be a one time testing to quantify the emissions.

**4. Specific Monitoring Requirements:**

Weekly observations of emissions from both transfer ladle and pouring shall be made.

**5. Specific Record Keeping Requirements:** A log shall be kept on all visible emissions observations. Notification in the weekly log shall be made of the following:

- a. Whether any air emissions (except for water vapor) were visible from the plant.
- b. Whether the visible emission were normal for the process.
- c. The cause of any abnormal emissions and any corrective actions taken.

**6. Specific Reporting Requirements:** See SECTION F.**7. Specific Control Equipment Operating Conditions:** None

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****13 (530)      Paint Spray Booth, construction commenced: September 8, 1997**

**Description:** The emission point consists of a paint booth where both primer and paint are applied. The booth has a panel filter with a control efficiency of 99% for particulates only.

Annual hours of operation:	8760 hours/year	
Make/Model:	None	
Control Device:	Filter (PM10 and PT only)	
Emission Sources:	Max Throughputs:	Pollutants:
Paint	3.775 gal/hr	PM10, PM, VOC

**APPLICABLE REGULATIONS:**

**401 KAR 59:010, New process operations.** Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975.

**1. Operating Limitations:**

- a. The spray booth fabric filter emission control system must be in place and effectively operational when the spray paints is applied.

**2. Emission Limitations:**

- a. *Opacity Standard:* Pursuant to Regulation 401 KAR 59:010 Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4.

**Specific Monitoring Requirements** and 5. **Specific Record Keeping Requirements** below.

- b. *Mass Emission Standard for particulate emissions from all emission points:* Pursuant to Regulation 401 KAR 59:010 Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour.

Compliance demonstration: Section 4 (5), the process weight shall be determined in average hourly tons by averaging the daily process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \cdot EF$$

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Where E is particulate emissions in lbs/hr, P is averaged process weight in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of process weight.

- c. Volatile organic compound (VOC) emissions shall not exceed 90 tons/yr based on a 12 month rolling total for the entire source to preclude a major source Title V classification.

**3. Testing Requirements:**

Pursuant to Regulations 401 KAR 61:005 Section 2 (2) and 401 KAR 50:45 Section 1, performance testing using the Reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

The permittee shall monitor:

- a. The total monthly processing rate.
- b. The hours per month of the operation of the unit(s).
- c. Observations of visible emissions from the emission point shall be made weekly.
- d. If visible emissions are seen during the observation, then the permittee shall initiate all necessary procedures to determine the opacity and repairs to the equipment..
- e. See Section 5, Specific Recordkeeping Requirements below.

**5. Specific Record Keeping Requirements:**

- a. A log shall be kept of all emission observations. Notation in the weekly log shall be made of the following:
  - i) Weekly observations of visible emissions during operation of associated equipment.
  - ii) Observations of visible emissions during all periods of control equipment malfunction.
- b. Recordkeeping consisting of all materials containing VOC's used with VOC content for each and total VOC emissions shall be kept monthly. The total VOC emissions shall be summarized each month and a 12 month rolling total shall be calculated, recorded, and compared to the emissions limitation as specified in the Plant Wide emission limits in Section D.

**6. Specific Reporting Requirements:**

Semi-annual reports shall be sent to the Division's Bowling Green Regional Office showing the monthly and 12 month rolling total VOC emissions as required in No. 5 of this section. See Section F.

**7. Specific Control Equipment Operating Conditions:**

- a. Filters shall be in place and operational at all times when the paint spray booth is operating.
- b. Filters shall be changed as often as needed to comply with the emissions limitations.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Applicable Regulation</u>
1. Borax Rinse Tank – Indirect Fired Heat Exchanger(02)	None
2. Wash & Rinse Tanks – Indirect Fired Heat Exchanger(03)	None
3. Wet Machining (11)	401 KAR 59:010
4. Roads – Paved (14)	401 KAR 63:010
5. Drum Washer (15)	401 KAR 59:010
6. Air Make-Up Units, natural gas (2.5 MMBtu/hr, and two of 6.3 MMBtu/hr)..	401 KAR 59:010
7. Drying Heater, (10) 620 Natural gas, 1.65 MMBty/hr	401 KAR 59:015

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate Matter (PM), Volatile Organic Compound (VOC) and Hazardous Air Pollutants (HAP) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. Source wide Particulate Matter (PM) emissions shall not exceed 90 tons per year (12 consecutive months period) to avoid major source status.

**Compliance Demonstration:**

The following formula or equivalent may be used in calculating emissions of particulate matter (PM/PM10):

PM/PM10 emitted monthly (tons/month) =  $\sum[(\text{Monthly processing rate} \times \text{Emission Factor as determined from AP-42} \times (1 - \text{Control Efficiency})) / 2000 \text{ (lbs/ton)}]$

- \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.

4. Source wide Volatile Organic Compound (VOC) emissions shall not exceed 90 tons per year (12 consecutive months period) to avoid major source status.

**Compliance Demonstration Method:**

$$\text{Actual VOC Emissions} = \sum_{i=1}^n M_i \rho_i$$

Where;

- $\rho$  = weight percent of VOC in coating less water and/or exempt solvent  
 $i$  = individual coating material (primer/paint, thinner, cleaner, topcoat 1, topcoat 2, etc.)  
 $n$  = total number of coating materials used  
 $M$  = pounds of coating material "i" used

5. Source wide Hazardous Air Pollutants (HAPs) emissions shall not exceed 9.0 tons per year (12 consecutive month period) for a single HAP, or 22.5 tons per year (12 consecutive month period) of combined HAPs to avoid major source status.

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (continued)

### **Compliance Demonstration Method:**

$$\text{i. Single HAP Emission; } \text{HAP}_j = \sum_{i=1}^n M_i \rho_i$$

Where;

$\rho$  = weight percent of HAP<sub>j</sub> in material “i.”

i = individual coating material (primer/paint, thinner, cleaner, topcoat 1, topcoat 2, etc.)

j = individual HAP emission (i.e. toluene, xylene, etc.)

n = total number of coating materials used containing single HAP<sub>j</sub>

M = pounds of coating material “i” used

ii. Shall be less than 22.5 tons/yr combined HAP based on the following equation:

$$\sum_{i=1}^{17} \sum_{j=1}^n \sum_{k=1}^m \left( \frac{P_j \cdot \text{HAP}\%_k \cdot \text{HAP}_{EFk}}{2000} \right) \cdot A_k \cdot B_k \cdot t_{ij} \leq 22.5 \text{ TPY}$$

Where n is the unit number, m is individual HAP, P<sub>j</sub> is the hourly process rate, HAP%<sub>k</sub> is the individual HAP volume or weight % corresponding to the process rate units, HAP<sub>EFk</sub> is the KYEIS individual HAP emission factor in lbs/process rate unit, A<sub>k</sub> is the capture efficiency and B<sub>k</sub> is the control efficiency of any integral control device and t<sub>ij</sub> is the corresponding hours in operation/year.

a. **Pb**: Pursuant to 401 KAR 63:021, lead emissions from emission points 1-17 shall not exceed 0.185 lbs/hr based on the following equation:

$$\sum_{i=1}^{17} P_i \cdot \text{Pb}_{EFi} \leq 1.85 \text{ lbs/hr}$$

Where P<sub>j</sub> is the hourly process rate for unit i and Pb<sub>EFj</sub> is the corresponding KYEIS Pb emission factor in lbs/process rate unit.

6. A monthly record of all coatings, thinners, clean-up solution used should be kept. The records shall include the type, volume, and VOC content by weight.
7. A monthly record of all materials containing HAP(s) used for plant wide operation shall be kept. The recording shall include the product type, amount used and the weight percentages of all individual HAPs.
8. Every month a new 12-month rolling total for PM/PM10, VOC and HAP emissions shall be calculated.



## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Pursuant to 401 KAR 50:012 Section 1 (1), in the absence of a specific regulatory standard, all air contaminant sources shall, as a minimum, apply control procedures that are reasonable, available and practical.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality  
Bowling Green Regional Office  
1508 Westen Avenue  
Bowling Green, KY 42104

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

**SECTION G - GENERAL PROVISIONS****1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

### **2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

### **3. Permit Revisions**

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### **4. Testing Requirements**

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

### **5. Acid Rain Program Requirements**

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

### **6. Emergency Provisions**

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;



**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
  - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].
7. Ozone depleting substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
    - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
    - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
    - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
    - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
    - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
    - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
  - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### 8. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

None.

**SECTION I - COMPLIANCE SCHEDULE**

None.